

## **ABSTRACT**

An apparatus and method for forming and joining a first sheet material (A) located in a nest (30) to a second sheet material (B) positioned on top of the first sheet material. The apparatus includes a positional pressure roller tool or positional pressure variance unit (50) for performing the forming and joining operations. The PPVU (50) may include both a main roller (58) and a touch-up roller (60). The PPVU (50) is operatively associated with a programmable positioning apparatus in the form of a robotic arm (52) and a machine cell (10) whereby the position of the robotic arm (52) relative to the nest (30) dictates the applied pressure at the interface between the roller (72) and the nest (30).

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